Contribution to the European Commission's public consultation *Consumer Agenda 2025-2030 and action plan on consumers in the Single Market*

Arcep – July 2025

As a regulator of digital infrastructures whose ambition is to make said infrastructures accessible everywhere and to everyone, and more broadly future-proof, Arcep strongly supports the European Commission's initiative to ensure that consumers can fully benefit from the Single Market but also to promote a fair and green digital economy. The issues raised in this consultation are central to consumer protection and empowerment, which is also intrinsically linked to the EU's digital future.

Arcep's experience of digital infrastructures regulation and its various works – ranging from open markets to digital sustainability – lead to highlight three essential pillars that could guide European action for the Consumer Agenda 2025-2030: regulation as a means of serving consumer interests; upholding users' right to an open Internet and going further to empower them in the digital age; and finally, achieving digital sustainability for the benefit of future generations.

1 Regulation as a means of serving consumer interests

Good connectivity and good prices, thanks to competition and innovation enabled by *ex ante* regulation

***Ex ante* regulation promoting competition and investment may respond or contribute to two goals: firstly, bringing connectivity to all territories and citizens; secondly, providing quality and affordable prices for consumers and businesses.**

In carrying out such a pro competition and pro efficient investment regulatory approach in the telecoms sector, Arcep has indeed helped to facilitate the rapid and large-scale rollout of fibre across France. The framework enabled Arcep to use mechanisms like access and geographically differentiated regulation based on economic profitability. For the consumers, the benefits include connectivity, service availability, choice of service provider, quality of service but also prices. Such positive effects stem from a sector regulation, based on a flexible regulatory toolbox that national regulators (NRA) have used to open the sector to competition. It is more precisely an *ex ante* regulation, consisting of both asymmetric and symmetric regulation, that has been used by NRA to achieve the 2030 connectivity goals set out in the Digital Decade policy programme. In France, a hybrid framework (incl. a co-investment scheme) drawn from this toolbox has enabled telecom operators to roll out their networks and provide their service as widely as possible and maintained competition. The results can be seen in figures from 2025, in terms of:

- fibre coverage (92% premises are covered within France);
- take-up (72% of premises connected to fixed broadband are already FttH subscribers); but also,
- competition and consumer choice (99% of premises in which FttH is available are served by at least two internet access providers).

Overall, the positive effects of such regulation on connectivity have been acknowledged by the European Commission, notably in its Digital Decade 2025 country report for France[1].

Ex ante regulation to foster competition and innovation, by enabling several operators to enter the market – in particular by optimising costs and infrastructure works –, has resulted in very attractive prices for consumers and given them a choice of operators. As Arcep's latest study on electronic communications markets shows, average monthly bills in France have fallen[2], which ultimately benefited consumers' purchasing power. Not to mention roaming regulation, this shows how wholesale regulation, as provided for by the European Electronic Communications Code (EECC)[3], may be less known to the general public but is very effective for the benefit of end users.

To sum up, by promoting competition and contributing to greater innovation and lower prices in the market, *ex ante* regulation is highly beneficial to consumers, both in terms of purchasing power and freedom of choice with regard to electronic communications operators and internet service providers. Such regulation can notably help to make digital technology accessible to all, particularly vulnerable groups. **Consequently, *ex ante* regulation must be preserved in the light of any future legislative changes.**

Information, freedom of choice and enlightened decision thanks to data-driven regulation

As aimed for by the European Declaration on Digital Rights and Principles, "**all people in the EU should get the most out of the digital transformation"**[4]. In this regard, **data-driven regulation is beneficial in a number of ways,** in particular **by giving consumers greater freedom of choice,** by providing them with **the right information**, **and by making regulatory measures more agile and relevant.**

First, **access to information is essential, and a key condition for consumers' freedom of choice**. With accurate, easy-to-read information, consumers can indeed make informed choices when making their consumption decisions. With this goal in mind, Arcep provides tools that allow consumers to be informed and empowered, and bases its regulation on data: a data-driven regulation. To achieve this, data collection is essential, and Arcep has been given powers at national level by French legislators. Since then, Arcep has been publishing regular reports and studies, and updating mapping websites to provide users with high-quality and live information. While it became necessary to give users the means to stay informed about network quality, so that it might become a criterion when choosing their providers, it appeared that it also contributed to strengthen the investment monetization cycle, which stimulates competition, which is no longer based solely on price. As such, the ultimate aim of Arcep's "Mon réseau mobile" (My mobile network), "Carte fibre" (Fibre access maps) and "Ma connexion internet" (My internet connection) websites, is to empower consumers in making informed choices because the information provided corresponds to their needs (*e.g.,* availability of operator services, network's quality of service, etc.). This can also contribute to a goal of sovereignty, with more competitive players, – including from the EU –, and consumers, able to make an informed choice and buy European products. In this respect, it must be stated that the role of NRA is important in ensuring consumers have access to the information that is relevant; accuracy and readability being key elements.

[1] Digital Decade 2025, Country reports – France, PART 10/27, SWD(2025) 294 final, Brussels, 16.6.2025, p. 5. Digital_Decade_2025_country_report__France_pbUJnx5M0BA4MvfZ5XdfW7sWwa0_116911 (1).PDF

[2] To give just a few examples, the average monthly bill for fixed broadband and ultra-broadband services has fallen from €50 excluding VAT in the early 2000s to €37 excluding VAT by 2025, and the average monthly bill for mobile packages has fallen from €40 excluding VAT to €16 excluding VAT over the same period. Arcep, Observatory of the electronic communications markets in France, 23 May 2025. Marché des communications électroniques en France - Année 2024 - Résultats provisoires | Arcep

[3] Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code, OJ L, 321, 17/12/2018. EUR-Lex - 02018L1972-20241018 - EN - EUR-Lex

[4] See Digital Rights and Principles | Shaping Europe's digital future

Second, **data-based regulation enables flexible, targeted regulation**. Indeed, users' satisfaction in regulated sectors like electronic communications is a driver for regulators, enabling them to take appropriate regulatory actions. The platform "J'alerte l'Arcep" (Alerting Arcep) for instance, which enables any user to report a problem or malfunction encountered with their operator, aims to help Arcep detect weak signals, and ultimately provide systemic responses, hence improving the way the sector operates. While users will be offered advice sheets tailored to their problem, Arcep – by identifying recurring malfunctions and peak user alerts – will be able to take more targeted, and therefore more effective regulatory measures.

In parallel of the main takeaways from the platform, Arcep publishes an annual observatory of customer satisfaction with internet service providers and mobile operators. Based on this survey of 4,000 consumers, it can be noted that fixed and/or mobile network subscribers' overall satisfaction is rather high for all operators. However, for example, mobile users are increasingly confronted with fraudulent and abusive calls and text messages (*e.g.,* "Number spoofing"): the number of reports received increased seventeen-fold between 2023 and 2024[5]. Arcep publishes another annual survey, the "Digital barometer", based also on a sample of 4,000 respondents. This survey provides information on trends in digital equipment and uses[6].

In view of the above, sufficient, accurate and readable information, but also tools (*e.g.,* platforms) to report and take note of problems, enable consumers to make informed choices. It also allows public authorities to take measures better suited to consumer needs and protection, for which data collection powers are a *sine qua non*. **Given their positive effects to consumers, maintaining or granting data collection powers to authorities should thus receive the attention of policy-makers. This would support at EU level a data-driven regulation as a means of empowering end-users.**

Protection against abusive calls thanks to numbering solutions

Improving safety and security of individuals requires fighting against fraudulent calls. In the electronic communications sector, consumers must be confident in the calls they receive and therefore be protected.

Mobile users are increasingly confronted with fraudulent and abusive calls and text messages[7], which can have financial impacts on consumers[8]. These frauds can be amplified by number spoofing, which essentially involves phone number theft. Number spoofing can mislead fraud victims about the caller's identity or help fraudsters evade enforcement agencies.

To address these challenges, a large number of regulators and organizations are working on it and several directions have been taken in different countries. Prohibition of presenting a domestic number from abroad under penalty of masking the caller's number when it is not possible to verify its origin, national pooling of numbers of people who are roaming, authentication of calling numbers (see below), and so on, are among the solutions sought.

In France, for instance, a law was enacted in 2020 to combat unwanted telemarketing and fraudulent calls. This law requires telephone operators to authenticate call numbers using a set of protocols called STIR/SHAKEN[9] and to block calls lacking an authentication signature. Operators must verify the legitimacy of displayed calling numbers and interrupt calls from those that are not authentic. Consequently, phone number authentication adds a layer of trust to telephone communications in

[5] See more details in Arcep's recent press release. "Arcep presents the 2025 edition of the Customer satisfaction observatory and the annual scorecard for the "J'alerte l'Arcep" platform", 3 April 2025. Press release - Data-Driven Regulation (3rd April 2025)

[6] Digital barometer, 19 March 2025 Le baromètre du numérique - édition 2025 | Arcep

[7] "Arcep presents the 2025 edition of the Customer satisfaction observatory and the annual scorecard for the "J'alerte l'Arcep" platform", *op. cit.*

[8] For instance, the fake bank advisor scam accounted for 379 million euros of the 1.2 billion euros in payment fraud in 2023 in France.

[9] Secure Telephone Identity Revisited and Signature-based Handling of Asserted Information Using toKENs

France, making it more difficult for scammers to impersonate legitimate businesses or individuals. While Arcep has supported the operators in their work to authenticate numbers, it is important to note that significant and highly technical work remains.

Overall, enabling national authorities to fight spoofing and thus track down fraudsters appears to be key to restoring consumer confidence in the calls they receive, thereby helping to protect them more generally.

2 Upholding users' right to an open Internet and going further to empower them in the digital age

Safeguarding EU consumers' freedom of choice and expression on the Internet

The right to an open Internet, which guarantees the freedom of choice for users, has become an essential principle in Europe and must be preserved and updated in the light of new uses and technological developments. More broadly, opening up digital ecosystems (*e.g.*, in the field of cloud, data, etc.) helps to increase the benefits for European consumers and businesses. It should be further encouraged at European level, also in this respect.

As the Internet is a space for freedom of expression, communication, access to knowledge and sharing, as well as freedom of enterprise and innovation, European users' right to access and share the content of their choice online is essential. The principle of open internet access has been enshrined in EU law since 2015 with the European Open Internet Regulation[10] and Arcep – along with its European counterparts – has been given task of enforcing net neutrality. It aims to protect the exercise of the above-mentioned freedoms, and ultimately the empowerment of online users by preventing intermediary players, notably internet service providers (ISPs) to jeopardize the possibility for end-users to access and propose content and services on the internet. As healthy interconnections/relationships between ISPs and content and application providers (CAPs) are essential to the smooth operation of the internet, Arcep has been monitoring the IP interconnections market. To this end, Arcep collects data which it publishes in its "Barometer of data interconnection"[11].

If the Open Internet Regulation has included a number of provisions aimed at safeguarding EU citizens right to access an open Internet, by preventing abuses by internet service providers in particular, other intermediaries have still the power to restrict users' ability to access certain content and services on the internet. Indeed, the openness of the internet can be challenged also by the influence of operating systems on the 'openness of devices' and, more generally the restrictive role of 'structuring' platforms in the freedom of users to access and share content[12]. The *Digital Markets Act* (DMA) has brought answers but the increasing use of generative AI as a new human-machine interface to access internet content[13], such as – but not limited to – online search queries, could create new challenges for internet openness. For the moment, this issue has not been specifically addressed by EU regulation; neither by the *DMA* nor the *Artificial Intelligence Act.*

As some elements of the internet ecosystem are beyond the 2015 Open Internet Regulation scope, there is the need to ensure that other digital players are not undermining users' freedom of choice

[10] Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union, OJ L, 310, 26/11/2015. Regulation - 2015/2120 - EN - EUR-Lex

[11] Arcep - Barometer of Data interconnection in France 2024. While Arcep has been collecting data on interconnection and data transport on a biannual basis since 2012, the BEREC also recently collected data at European level as part of its 2024 report on interconnection practices.

[12] See in particular the report "Devices, the loophole of open internet" published in 2018.

[13] A 2024 Gartner study foresees that search engines volume could decline by 25% by 2026 due to the rise of AI chatbots. See Gartner Predicts Search Engine Volume Will Drop 25% by 2026, Due to AI Chatbots and Other Virtual Agents

and innovation. In other words, and in line with the European Declaration of Digital Rights and the principles of the Digital Decade[14], protecting users' right to an open Internet – including from a device's perspective – is intrinsic to comprehensive online consumer protection. **As a guarantee of consumer protection, it seems thus essential that the current Open Internet Regulation be preserved at European level and inspire other policies.**

Empowering generative AI users and fostering internet content diversity

In the context of the development of AI, **it is necessary to ensure that users of generative AI continue to enjoy their right to an open internet and to have access to diverse, high-quality internet content.**

Generative AI becoming the new possible "gateway" to users' access to the Internet, the empowerment of AI end-users through knowledge, transparency and greater user control over AI systems should be promoted in order to preserve the Internet as an open space of freedoms, emancipation and innovation. To ensure that AI end-users benefit from their right to an open Internet, which should be guaranteed to all EU citizens regardless of the type of tool/services used to access online content, several areas of action could, among others, be considered. They could be as follows: i) greater awareness of the benefits and limitations of generative AI and of their enrolment in AI training, ii) increased level of transparency and explicability of generative AI providers to users, and iii) access to less biased or self-configurable AI systems.

In addition, certain aspects relating to healthier competition and greater innovation in AI markets should be examined in the ultimate interest of EU consumers. The question of mitigating the risks of dominance by major content generators over access to internet content should in this regard be addressed[15]. Monitoring the implementation of existing portability obligations and promoting the use of interoperable standards by major generative AI providers seem relevant. They would facilitate users' capacity to switch between content generators. These mentioned suggestions would overall and greatly help strengthen users' ability to access more qualitative and diversified internet content.

All the above avenues for improvement, designed with competition and consumer protection in mind – to the benefit of European citizens –, have been developed in greater detail by Arcep, notably in its response to a DG COMP's consultation on AI and the Metaverse in 2024[16]. These suggestions are encouraged to be examined carefully by the European Commission as they help to address one of the challenges identified in this *Call for evidence*, namely that "new technologies and data-driven practices are sometimes used to undermine consumer choice"[17]. **With the development of new technologies, and in particular generative AI, guaranteeing user empowerment is a crucial issue which, in addition to raising user awareness, also entails fair competition in these markets.**

[14] European Declaration on Digital Rights and Principles (2022). European Declaration on Digital Rights and Principles | Shaping Europe's digital future

[15] For instance, through the setting of clearer rules securing the possibility of techno-economic agreements between traditional CAPs and content generators.

[16] Arcep's contribution to the call for contributions on competition in generative AI, March 2024. Arcep-raconte_contribution-Arcep-IA-generative_lepost70.pdf

[17] European Commission, Call for evidence for an initiative (without an impact assessment), "Consumer Agenda 2025-2030 and action plan on consumers in the Single Market", Ref. Ares(2025)3998664, p.2.

3 Achieving digital sustainability for the benefit of future generations

To promote the sustainability of the digital future, ecodesign is a win-win for the planet and for consumers' time and money

Combating devices obsolescence not only helps to reduce the environmental footprint of digital technologies, it also benefits consumers in terms of purchasing power and knowledge of what they are buying.

While digitalisation could be considered as a driver supporting the decarbonisation of some other sectors and promoting the European competitiveness, the ICT sector accounts for almost 4% of total greenhouse gas (GHG) emissions worldwide[18]. Beyond GHG emissions, ICT is also responsible of other types of environmental impacts (*e.g.,* metals and minerals depletion, water consumption or e-waste generation)[19]. These impacts entail risks for future generations, as they tend to grow rapidly; recent estimates in France show that **the carbon footprint of the digital ecosystem could triple by 2050**[20] if no action is taken. As such, the ICT sector cannot be exempted from making its own efforts and reducing its own impact. In this respect, the EU has already implemented measures to address the issue that are greatly welcome, with for instance the Ecodesign for Sustainable Products Regulation (ESPR)[21] and the EU's energy labelling framework. These efforts must be pursued, with more ecodesign requirements and by empowering end-users through environmental transparency on digital products.

Devices, in particular those that are most commonly used such as smartphones or computers, constitute the largest part of the ICT's carbon footprint; which is mainly due to its manufacturing phase[22]. Although main devices are being addressed by the current EU's regulatory framework on ecodesign, other digital products such as routers and set-top boxes which have significant environmental impacts (*i.e.,* their electricity consumption is more than five times that of fixed networks in France[23]) and radio network equipment need to be considered[24]. Furthermore, **to strengthen the efforts on the ecodesign of digital products at EU level, software obsolescence should be addressed via the definition of ecodesign requirements for operating systems, considering their impact on the obsolescence of devices**. The French General policy framework for the ecodesign of digital services (RGESN)[25], a set of best practices published in May 2024, underlines in this regard the positive impact of long-term software support in favor of extending the lifespan of devices, and especially the importance of keeping usable digital services on older model devices[26].

In addition to ecodesign requirements and the mitigation of software obsolescence, **data-driven tools** (*e.g.,* labels, index or public databases) represent effective levers for creating positive market incentives for the development of sustainable products[27]. The plurality of environmental impacts

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[18] "ADEME-Arcep study: assessment of the digital environmental footprint in France in 2020, 2030 and 2050", Press kit, March 2023, p.10.

[19] *Ibid*., p.3

[20] According to the ADEME-Arcep study, with no further action to limit the growth of the digital ecosystem's environmental footprint (i.e. the trend-based scenario), its carbon footprint could triple to 2050 (from around 17 to 50 Mt CO2 eq.) in France.

[21] Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC, OJ L, 2024/1781, 28/06/2024.

[22] In France for instance, it accounts for 65% to 90% of the digital environmental footprint. "ADEME-Arcep study: assessment of the digital environmental footprint in France in 2020, 2030 and 2050", *op. cit.*, p.3 and p.5.

[23] Arcep, « Enquête annuelle 'Pour un numérique soutenable' », 4th edition (data from 2023), 2025, p. 36.

[24] Arcep, "Ecodesign and Energy Labelling for digital products – Contribution to the European Commission regulations under preparation", July 2024.

[25] General policy framework for the ecodesign of digital services, Arcep and Arcom in connection with ADEME, May 2024.

[26] For computers for instance, a minimum period of availability for security updates for operating systems supplied to the user should be set at 10 years from end of placement on the market of the associated computer. See Arcep, « Ecodesign and Energy Labelling for digital products – Contribution to the European Commission regulations under preparation", *op. cit.*

[27] The relevance of *data-driven* regulation tools to achieve digital sustainability has been raised in several work of Arcep and BEREC such as Arcep report "Achieving digital sustainability" (2020), BEREC report "Assessing BEREC's contribution limiting the impact of the digital sector on the environment" (2022), BEREC report "ICT sustainability for End-Users"(2024).

related to the entire life cycle of digital products should thus be examined (*i.e.,* by considering other impact categories such as climate change and resource depletion). It would indeed be relevant to consider the inclusion of a durability/repairability index in the EU's energy labelling framework[28].

As there is no arguing that ecodesign and energy labelling are powerful policy instruments to support the greening of European economies, any action that can be taken to **extent the lifespan of devices and reduce the high renewal rate** must be considered to reduce their environmental footprint. Last but not least, it should be strongly underlined that such policy instruments also contribute to empower end-users through benefits in terms of purchasing power and greater awareness of the differentiated environmental impact of their digital products. This would also correspond to one of the problems identified in this *Call for evidence* that the initiative aims to address: "Consumers' choices often do not reflect their intentions and environmental concerns. Frequently, sustainable choices are not straightforward or easily available, and they may not be always affordable"[29]. **Given the various positive effects outlined above, the EU could better reduce the obsolescence of equipment by tackling software obsolescence and introducing ecodesign requirements for additional digital products and operating systems, alongside greater environmental transparency.**

<u>Less is more: ecodesign of digital services to reduce their environmental footprint and give consumers greater control over their use</u>

The ecodesign of digital services, which effectively helps to reduce the overall environmental footprint of the ICT sector, is also a pillar of consumer protection, for example by limiting the abuses of the attention economy.

The way digital services are designed and maintained is a component of the environmental footprint of European economies. There is an interdependence between the growth in digital uses through services and the increase in demand for equipment – across the whole value chain – which is why it is essential to act at the source by addressing how and why one consumes. This interdependence between the various components of digital technology (devices, data centres, networks and services) needs to be considered; they are interrelated since equipment supports the use of services as demonstrated in a 2023 Arcep-ADEME study[30].

Beneficial for both the environment and consumers, the extension of ecodesign requirements to digital services would result in practical measures – among those developed in the already mentioned RGESN[31] – such as imposing ecodesign obligations on video. In practice, this could entail: obligation to use efficient codecs, resolutions adapted to the device; introduction of energy-saving configuration options (reduced quality of videos viewed); obligation to offer a 'listen only' mode for videos; obligation to offer an option to deactivate *autoplay*; and limitations on infinite scrolling as well as the obligation for major service providers to guarantee that their digital services will work on older devices (*i.e.,* seven to ten years depending on the type of device). This would also concur with the necessity, based on the results of ongoing work on measuring the environmental footprint of AI, to measure the environmental impact of AI and to encourage the use of more frugal AI models.

As a matter of fact, such measures that would further contribute to reducing the environmental impact of digital technologies, would also **enable consumers to fully control their use of digital services by limiting the attention-grabbing techniques** which can lead to overconsumption such as scrolling or

[28] It would be in line with existing work and methodologies, especially the Product Environmental Footprint Category Rules (PEFCR) developed by the JRC.

[29] European Commission, Call for evidence for an initiative (without an impact assessment), "Consumer Agenda 2025-2030 and action plan on consumers in the Single Market", *op. cit*.

[30] "ADEME-Arcep study: assessment of the digital environmental footprint in France in 2020, 2030 and 2050", *op. cit*.

[31] General policy framework for the ecodesign of digital services", Arcep and Arcom in connection with ADEME, *op. cit.*

auto-play designs. The need to address such issue of addictive design of digital products is for instance also mentioned in the European Commission's *Call for evidence*[32]. Ecodesign requirements for digital services, which would mainly concern large digital service providers, would therefore also have the beneficial effect of combating the abuses of the attention economy in the interests of consumer protection. **In other words, the introduction of ecodesign measures for digital services would have the dual advantage of reducing the environmental impact of digital technologies and limiting the abuses of the attention economy in the interests of consumers.**

Conclusion

As the European Commission prepares to define the new EU's consumer policy for the next five years with the Consumer Agenda 2025-2030, Arcep believes that the following key points would support its objectives, notably **promoting a fair green and digital economy while protecting consumers**, including the most vulnerable. **Regulation, notably *ex ante* and/or data driven, is designed to serve consumer interests and should therefore be maintained**. In light of new technologies development, there is also further need to adequately **protect users' right to an open internet**. This includes extending the principle of freedom of choice, which also ensures the capacity to innovate, to the field of AI. Eventually, **reducing the environmental impact of the ICT sector benefits EU consumers – and future generations** as a whole – in a number of ways, **not only by limiting pollution and other environmental impacts, but also by boosting users' purchasing power and limiting the abuses of the attention economy**. Beyond these proposals, it will remain important to monitor technological innovations and developments as well as the benefits and issues that may arise in connection with them, whether economic, societal or environmental.

[32] European Commission, Call for evidence for an initiative (without an impact assessment), "Consumer Agenda 2025-2030", *op. cit.*